FULBRIGHT & JAWORSKI L.L.P.
A REGISTERED LIMITED LIABILITY PARTNERSHIP
600 CONGRESS AVENUE, SUITE 2400
AUSTIN, TEXAS 78701-3271
WWW.FULBRIGHT.COM

SBERESFORD@FULBRIGHT.COM
DIRECT DIAL: (512) 536-3168

TELEPHONE: (512) 474-5201
FACSIMILE: (512) 536-4598

December 16, 2003

CERTIFICATE OF MAILING
37 C.F.R 1.8

I hereby certify that this correspondence is being deposited with the U.S. Postal Service with sufficient postage as First Class Mail in an envelope addressed to: MS DD, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date below:

December 16, 2003 — Date
Sharon A. Beresford

**MS DD**
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

RE: *U.S. Patent Application No. 10/618,102 entitled "QUANTITATIVE RT-PCR TO AC133 TO DIAGNOSE CANCER AND MONITOR ANGIOGENIC ACTIVITY" – Edward H. Lin et al.*
*Our reference: UTSC:755US*
*Client reference: MDA02-052*

Sir:

Enclosed for filing in the above-referenced patent application is an Information Disclosure Statement, Form PTO-1449, and references A1-A2 and C1-C31.

No fees are believed to be due in connection with the filing of this Information Disclosure Statement, however, should any fees under 37 C.F.R. §§ 1.16 to 1.21 be deemed necessary for any reason relating to the enclosed materials, the Commissioner is authorized to deduct the appropriate fees from Fulbright & Jaworski Deposit Account No.: 50-1212/UTSC:755US.

Please date stamp and return the enclosed postcard evidencing receipt of these materials.

Respectfully submitted,

Sharon A. Beresford
Reg. No. 52,615
Patent Agent

SAB/kmv
Encl.: as noted

25365934.1

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:
Edward H. Lin *et al.*

Serial No.: 10/618,102

Filed: July 11, 2003

For: QUANTITATIVE RT-PCR TO AC133 TO DIAGNOSE CANCER AND MONITOR ANGIOGENIC ACTIVITY IN A CELL SAMPLE

Group Art Unit: 1623

Examiner: Unknown

Atty. Dkt. No.: UTSC:755US

CERTIFICATE OF MAILING
37 C.F.R 1.8

I hereby certify that this correspondence is being deposited with the U.S. Postal Service with sufficient postage as First Class Mail in an envelope addressed to:, MS DD, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date below:

December 16, 2003
Date

Sharon A. Beresford

## INFORMATION DISCLOSURE STATEMENT

**MS DD**
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Sir:

In compliance with the duty of disclosure under 37 C.F.R. § 1.56, it is respectfully requested that this Information Disclosure Statement be entered and the documents listed on attached Form PTO-1449 be considered by the Examiner and made of record. Copies of the listed documents required by 37 C.F.R. § 1.98(a)(2) are enclosed for the convenience of the Examiner.

In accordance with 37 C.F.R §§ 1.97(g), (h), this Information Disclosure Statement is not to be construed as a representation that a search has been made, and is not to be construed to be

an admission that the information cited is, or is considered to be, material to patentability as defined in 37 C.F.R. § 1.56(b).

The present Information Disclosure Statement is being filed prior to the receipt of a first Official Action reflecting an examination on the merits, and hence is believed to be timely filed in accordance with 37 C.F.R § 1.97(b). No fees are believed to be due in connection with the filing of this Information Disclosure Statement, however, should any fees under 37 C.F.R. §§ 1.16 to 1.21 be deemed necessary for any reason relating to these materials, the Commissioner is authorized to deduct the appropriate fees from Fulbright & Jaworski Deposit Account No.: 50-1212/UTSC:755US.

Applicants respectfully request that the listed documents be made of record in the present case.

Respectfully submitted,

Sharon A. Beresford
Reg. No. 52,615
Agent for Applicants

FULBRIGHT & JAWORSKI L.L.P.
600 Congress Avenue, Suite 2400
Austin, Texas 78701
(512) 474-5201

Date: December 16, 2003

| Form PTO-1449 (modified) | Atty. Docket No. UTSC:755US | Serial No. 10/618,102 |
|---|---|---|
| List of Patents and Publications for Applicant's<br>INFORMATION DISCLOSURE STATEMENT<br>(Use several sheets if necessary) | Applicant<br>Edward H. Lin *et al.* | |
| | Filing Date:<br>July 11, 2003 | Group:<br>1623 |

| U.S. Patent Documents | Foreign Patent Documents | Other Art |
|---|---|---|
| *See Page 1* | *See Page 1* | *See Page 1* |

## U.S. Patent Documents

| Exam. Init. | Ref. Des. | Document Number | Date | Name | Class | Sub Class | Filing Date of App. |
|---|---|---|---|---|---|---|---|
| | A1 | 6,329,179 | 12/11/01 | Kopreski | 435 | 91.2 | 3/14/97 |
| | A2 | 6,037,129 | 3/14/00 | Cole *et al.* | 435 | 6 | 5/28/98 |

## Foreign Patent Documents

| Exam. Init. | Ref. Des. | Document Number | Date | Country | Class | Sub Class | Translation Yes/No |
|---|---|---|---|---|---|---|---|
| | | | | | | | |

## Other Art (Including Author, Title, Date Pertinent Pages, Etc.)

| Exam. Init. | Ref. Des. | Citation |
|---|---|---|
| | C1 | Asahara *et al.*, "VEGF contributes to postnasal neovascularization by mobilizing bone marrow-derived endothelial progenitor cells," *EMBO J.*, 18(14):3964-3972, 1999. |
| | C2 | Bhatia, "AC133 expression in human stem cells," *Leukemia*, 15(11):, 1685-1688, 2001. |
| | C3 | Boyer *et al.*, "Isolation of endothelial cells and their progenitor cells from human peripheral blood," *J. Vasc. Surg.*, 31(1-1):181-189, 2000. |
| | C4 | Buhring *et al.*, "AC133 antigen expression is not restricted to acute myeloid leukemia blasts but is also found on acute lymphoid leukemia blasts and on a subset of CD34+ B-cell precursosrs," *Blood*, 94(2):832-833, 1999. |
| | C5 | Byrne and Bundred, "Surrogate markers of tumoral angiogenesis," *Biological Markers*, 15(4):334-339, 2000. |
| | C6 | Corbeil *et al.*, "The human AC133 hematopoeitic stem cell antigen is also expressed in epithelial cells and targeted to plasma membrane protrusions," *Journal of Biological Chemistry*, 275(8):5512-5520, 2000. |
| | C7 | Dimitriou *et al.*, "In vitro proliferative and differentiating characteristics of CD133(+) and CD34(+) cord blood cells in the presence of thrombopoietin (TPO) or erythropoietin (EPO): potential implications for hematopoeitic cell transplantation," *Leukemia Research*, 27(12):1143-1151, 2003. |

25330684.1

| EXAMINER: | DATE CONSIDERED: |
|---|---|

EXAMINER: INITIAL IF REFERENCE CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP609; DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED. INCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.

| Form PTO-1449 (modified) List of Patents and Publications for Applicant's INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary) | Atty. Docket No. UTSC:755US | Serial N . 10/618,102 |
|---|---|---|
| | Applicant Edward H. Lin *et al.* | |
| | Filing Date: July 11, 2003 | Group: 1623 |

| U.S. Patent Documents | Foreign Patent Documents | Other Art |
|---|---|---|
| *See Page 1* | *See Page 1* | *See Page 1* |

## Other Art (Including Author, Title, Date Pertinent Pages, Etc.)

| Exam. Init. | Ref. Des. | Citation |
|---|---|---|
| | C8 | Folkman *et al.*, "Angiogenesis research: guidelines for translation to clinical application," *Thrombosis Haemostasis*, 86:23-33, 2001. |
| | C9 | Forraz *et al.*, "AC133+ umbilical cord blood progenitor demonstrate rapid self-renewal and low apoptosis," *British Journal of Haematology*, 119(2):516-524, 2002. |
| | C10 | Gill *et al.*, "Vascular trama induces rapid but transient mobilization of VEGFR2+AC133+ Endothelial precursor cells," *Circ. Res.*, 88(2):167-174, 2001. |
| | C11 | Handgretinger *et al.*, "Biology and plasticity of CD133+ hematopoietic stem cells," *Annals of the New York Academy of Sciences*, 996:141-151, 2003. |
| | C12 | Hariharan *et al.*, "Human immunodeficiency virus infection of human placental cord blood CD34+AC133+ stem cells and their progeny," *AIDS Res. Hum. Retroviruses*, 15(17):1545-1552, 1999. |
| | C13 | Hurvitz *et al.*, "Bevacizumab (a monoclonal antibody to vascular endothelial growth factor) prolongs survival in first-line colorectal cancer(CRC): results of a phase III trial of bevacizumab in combination with bolus IFL (irinotecan, 5-flurouracil, leucovorin) as a first-line therapy in subjects with metastatic CRC," PRO ASCO Conference, Chicago, Ill., abst #3536, 2003. |
| | C14 | Kanayasu-Toyoda *et al.*, "CD31 (PECAM-1)-bright cells derived from AC133-positive cells in human peripheral blood as endothelial-precursor cells," *Journal of Cellular Physiology*, 195(1):119-129, 2003. |
| | C15 | Lee *et al.*, AC133 antigen as a prognostic factor in acute leukemia," *Leukemia Research*, 25(9):757-767, 2001. |
| | C16 | Marchetti *et al.*, "Prediction of survival in stage I lung carcinoma patients by telomerase function evaluation," *Lab. Invest.*, 82(6), 2002. |
| | C17 | Miraglia *et al.*, "A response to AC133 hematopoietic stem cell antigen: human homologue of mouse kidney prominin or distinct member of a novel protein family?" *Blood*, 91(11):4390-4391, 1998. |
| | C18 | Mundhenke *et al.*, "Tissue examination to monitor antiangiogenic therapy: a phase I clinical trial with endostatin," *Clinical Cancer Res.*, 7:3366-3374, 2001. |
| | C19 | Nakatani *et al.*, "Circulating endothelial cells in Kawasaki disease," *Clinical & Experimental Immunology*, 131(3):536-540, 2003. |

25330684.1

| EXAMINER: | DATE CONSIDERED: |
|---|---|

EXAMINER: INITIAL IF REFERENCE CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP609; DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED. INCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.

| Form PTO-1449 (modified) | Atty. Docket No. UTSC:755US | Serial No. 10/618,102 |
|---|---|---|
| List of Patents and Publications for Applicant's | Applicant Edward H. Lin *et al.* | |
| INFORMATION DISCLOSURE STATEMENT | | |
| (Use several sheets if necessary) | Filing Date: July 11, 2003 | Group: 1623 |

| U.S. Patent Documents | Foreign Patent Documents | Other Art |
|---|---|---|
| *See Page 1* | *See Page 1* | *See Page 1* |

## Other Art (Including Author, Title, Date Pertinent Pages, Etc.)

| Exam. Init. | Ref. Des. | Citation |
|---|---|---|
| | C20 | Reyes *et al.*, "Origin of endothelial progenitors in human postnatal bone marrow," *J. Clin. Invest.*, 109(3):337-346, 2002. |
| | C21 | Reyes *et al.*, "Purification and ex vivo expansion of postnasal human marrow mesodermal progenitor cells," *Blood*, 98(9):2615-2625, 2001. |
| | C22 | Salven *et al.*, "VEGFR-3 and CD 133 identify a population of CD34+ lymphatic/vascular endothelial precursor cells," *Blood*, 101(1):168-172, 2003. |
| | C23 | Schmeisser *et al.*, "Monocytes coexpress endothelial and macrophagocytic linkage markers and form cord-like structures in Matrigel under angiogenic conditions," *Cardiovascular Res.*, 49:671-680, 2001. |
| | C24 | Shi *et al.*, "Influence of nitric oxide synthase II gene disruption on tumor growth and metastasis," *Cancer Res.*, 60:2579-2583, 2000. |
| | C25 | Shi *et al.*, "Regulation of vascular endothelial growth factor expression by acidosis in human cancer cells," *Oncogene*, 20:3751-3761, 2001. |
| | C26 | Singh *et al.*, "Identification of a cancer stem cell in human brain tumors," *Cancer Res.*, 63:5821-5828, 2003. |
| | C27 | Ueda *et al.*, "DNA microarray analysis of stage progression mechanism in myelodysplastic syndrome," *British Journal of Haematology*, 123(2):288-296, 2003. |
| | C28 | Vercauteren *et al.*, "CD133 (AC133) expression on AML cells and progenitors," *Cytotherapy*, 3(6):449-459, 2001. |
| | C29 | Xu *et al.*, "One-step analysis and quantification of RNA by RT-PCR: using high-temperature reverse transcription," *Focus*, 22(1):3-5, 2000. |
| | C30 | Yin *et al.*, "AC133, a novel marker for human hematopoietic stem and progenitor cells," *Blood*, 90(12):5002-5012, 1997. |
| | C31 | Yu *et al.*, "AC133-2, a novel isoform of human AC133 stem cell antigen," *Journal of Biological Chemistry*, 277(23):20711-20716, 2002. |

25330684.1

| EXAMINER: | DATE CONSIDERED: |
|---|---|

EXAMINER: INITIAL IF REFERENCE CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP609; DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED. INCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.